



Label me safe.



**CODONICS**



Let's eliminate medication errors, together.



# Your patients are counting on you. You can **count on Safe Label System**.®

**M**edication errors are happening right now... somewhere.

Maybe your facility has not been touched by this preventable tragedy, but you probably know of a hospital that has. Despite a world of best practices, standards and your pursuit to build a culture of safety, they still exist. Meeting and exceeding compliance has been extremely difficult. But it is finally within our reach to end medication labeling errors... forever.

Codonics Safe Label System (SLS) is an unprecedented tool in your fight against accidental patient harm. SLS addresses the three most common medication errors made during the selection, preparation, and administration of injectable and intravenous medications, helping to prevent vial and ampoule swaps, mislabeling, and syringe swaps.

Consider the staggering number of drugs that need to reach patients every day. Even from caring, competent professionals, mistakes are inevitable. SLS technology keeps you one step ahead. At the point of care, SLS uses barcode technology to read information from drug containers, and empowers you to safely label any medication, anywhere in your facility, with compliant labels.



## What is the **SAFE**Label System®?

Safe Label System is an award-winning, FDA-approved medical device that improves the safety and accuracy of medication management, integrating worldwide recognized best practices and international standards. Located at the point of medication preparation, Safe Label System utilizes barcode technology to read information from a drug container and electronically verify it against the pharmacy's hospital-approved drug database. When a drug is scanned on SLS, the clinician is immediately presented with audible and visual confirmation of the drug name and concentration, providing an electronic "double-check" to ensure the medication that was selected is correct. The system then automatically prints a fully compliant, easy-to-read full-color label, eliminating the need for handwriting and ensuring safety and accuracy.

SLS integrates with your existing workflow, adding compliance and pharmacy oversight at every location where on-demand medications are prepared, such as the OR, ICU, PACU, patient floors, and nurse medication prep stations, to deliver safe and predictable results. Safe Label System will help eliminate medication labeling errors and make healthcare safer for everyone.

Let us show you how it works...

*"In the actual clinical use of SLS, end users report improved efficiency (20-30%), reduced errors (95%), and improvements in compliance and related safety in connection with reduced near misses."*

**Swathi Allada**  
Frost & Sullivan Research Analyst,  
Medical Devices

FROST & SULLIVAN  
**2014** BEST PRACTICES AWARD

Recipient of Frost & Sullivan's  
Best Practices Award:  
2014 North American  
Medication Management  
Customer Value Leadership







# An unprecedented system for **safer care.**

**N**ever before has it been easier to empower every medication preparation area with pharmacy-level oversight and compliance. SLS brings pharmacy best practices and clinician expertise together to achieve hospital-wide compliance targeting improved safety and medication error reduction everywhere medications are being prepared.

Safe Label System is comprised of two main elements:

- **SLS Administration Tool (AT)** is the system's management software that allows pharmacy to easily create and control a drug formulary, including site-approved medications, concentrations and rules for use, expanding pharmacy's scope of influence without having a pharmacist present at the point of medication preparation.
- **SLS 500i® Point of Care Station (PCS)** located at the point of preparation, utilizes the approved, integrated drug formulary database. SLS PCS reliably confirms vial barcodes with audible feedback and visual display of the drug name and concentration, then prints full-color, ready to apply, compliant labels.

**That's just the beginning.** From pre-installation assessment to post-installation service and support - and everything in between - Codonics is there. Safe Label System features can include multiple label sizes; pre-configured label templates; connectivity via wired or wireless network; email status notifications pushed to key personnel; Lexicomp™ database updates; optional wired barcode scanner; and multiple safety checks that can be configured to suit each site's specific needs.

## SLS Workflow

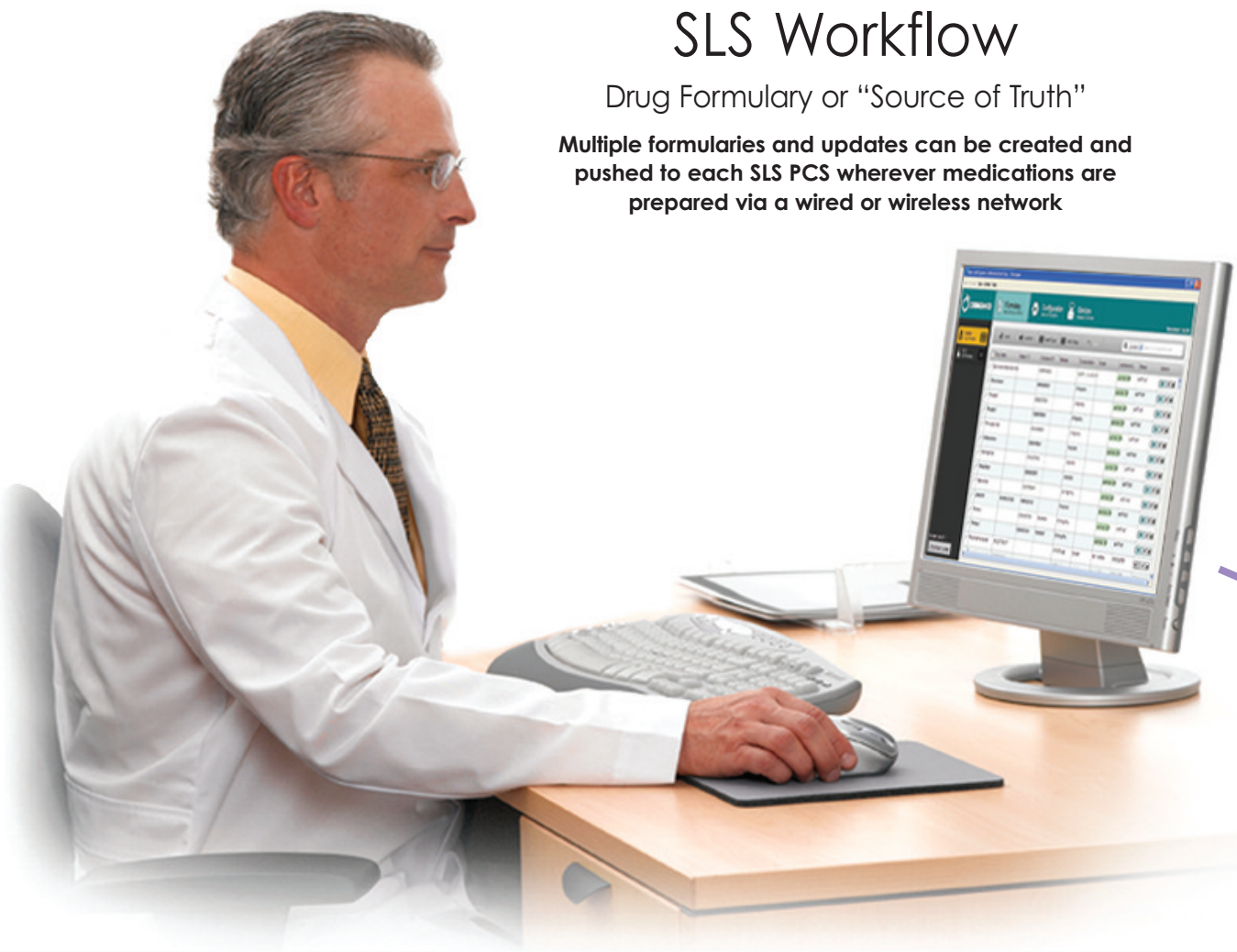
Drug Formulary or "Source of Truth"

Multiple formularies and updates can be created and pushed to each SLS PCS wherever medications are prepared via a wired or wireless network

FLOORS

ORs

PACU  
ICU





# It's never been easier to ensure **safety and compliance.**

## 1 It's as easy as 1, 2, 3:

First, pharmacy and medical staff collaborate to approve a verified database for SLS Point of Care Stations (PCS) that includes hospital-approved drugs, merged with hospital policies, best practices, local laws and internationally recognized standards to establish a reliable, comprehensive drug formulary, your **"source of truth."**

Then, utilizing this formulary, pharmacy expertise is brought to every medication preparation area throughout the facility, to remotely stationed SLS PCSs, without the need to have a pharmacist present.

Finally, using SLS PCS, your clinicians scan the barcode on a drug container and are presented with audible and visual feedback of the drug name and concentration. As the medication is being drawn up, the label is printed. The full-color, compliant label contains all of the elements **required by the Joint Commission.**

This is the essence of safe medication management, simplifying compliance and promoting safety without restricting your practice of medicine or clinical decisions.

1

### Approve Your Formulary

Quickly and easily approve your "source of truth."

SLS AT Master Drug Database

Drug Name	Master ID	Container ID	Tellman	Concentration	Route	Verification	Status	Actions
Bupivacaine-Epinephrine		0409904201		0.25 % 1:100,00		Verified X	ACTIVE	[Icons]
Rocuronium		0052045005		10 mg/mL		Verified X	ACTIVE	[Icons]
Propofol		6332327020		10 mg/mL		Verified X	ACTIVE	[Icons]
Propofol		0310030064		10 mg/mL		Verified X	ACTIVE	[Icons]
Phenylephrine		1001916339		10 mg/mL		Verified X	ACTIVE	[Icons]
Ondansetron		1001990517		2 mg/mL		Verified X	ACTIVE	[Icons]
Neostigmine		1001927039		1 mg/mL		Verified X	ACTIVE	[Icons]
Midazolam		1001902859		1 mg/mL		Verified X	ACTIVE	[Icons]
Heperidine		1001916244		100 mg/mL		Verified X	ACTIVE	[Icons]
Labetalol	00409226720	0409226720		5 mg/mL		Verified X	ACTIVE	[Icons]
Fentanyl		1001903705	fentaNYL	50 mcg/mL		Verified X	ACTIVE	[Icons]
Fentanyl		1001903339	fentaNYL	50 mcg/mL		Verified X	ACTIVE	[Icons]
fluocinolone topical	99220750917			0.00025 g/g	topical	Not Verified	OBSOLETE	[Icons]

2

### Scan the Barcode

At every medication preparation location throughout your facility, each SLS PCS is a "window" into your approved formulary, dispensing safe, compliant drug labeling.

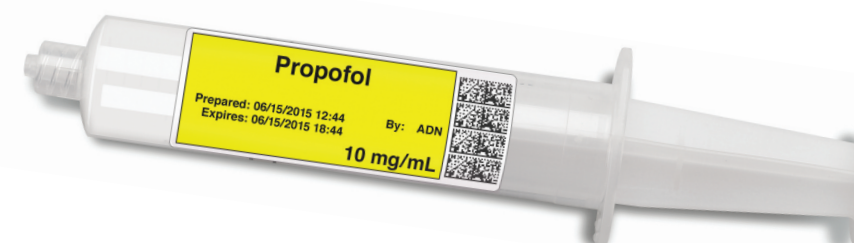
SLS PCS scanning a drug vial and printing a label.

Propofol  
10 mg/mL

3

### Apply the Label

Labels are color-coded based on drug class and clearly display all of the information about the drug. **Your staff will never have to handwrite another medication label** – you'll know exactly who prepared a drug, and when they prepared it.



SLS PCS prints easy to read, fully compliant medication labels **faster than they can be handwritten.**

"SLS presents a huge opportunity to improve patient safety and labeling compliance. SLS visually displays and audibly states the drug name and concentration when the drug is drawn up, produces a highly legible, durable and compliant label, and acts as a second set of eyes to help reduce human error. And as a triple check, the barcode on the syringe can be scanned into the anesthesia information system prior to administering it to the patient. Our personnel found SLS very easy to use. **It actually makes our work more efficient, as well as safer.**"

**T. Andrew Bowdle, MD, PhD**  
Cardiothoracic Anesthesiologist



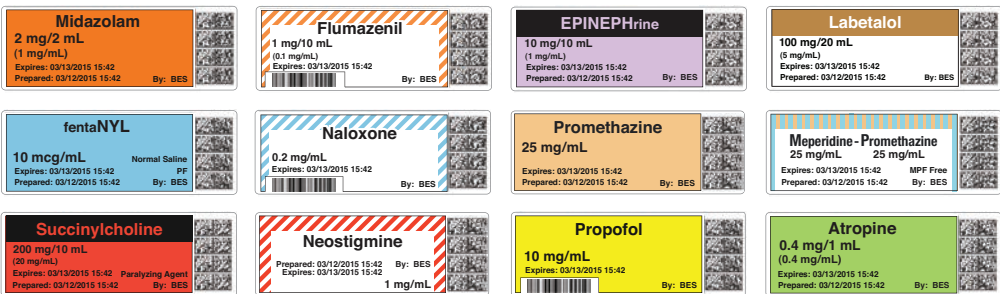
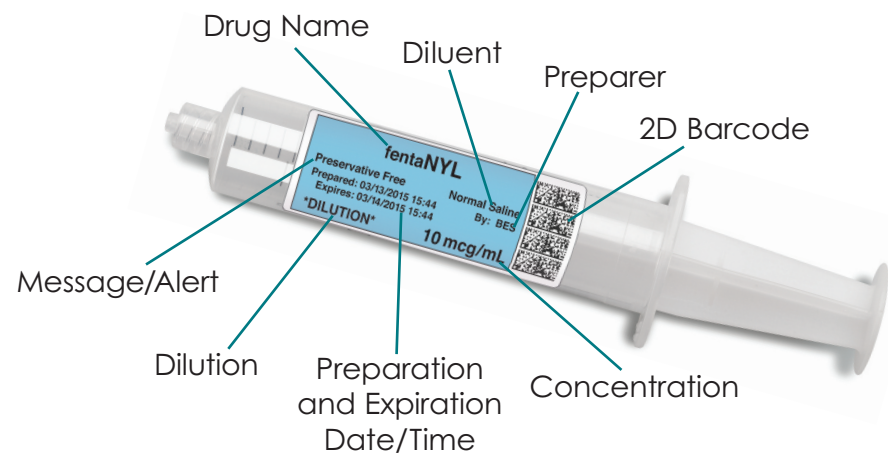


# Another set of eyes to double-check what you already know.

In the OR, anesthesiologists are met with competing demands, coupled with the challenge to handwrite the required drug information in a legible manner on a very small area. **SLS Point of Care Station (PCS)** uses barcode technology to read information from drug containers and empowers you to label any medication on demand, anywhere in your facility, with a Joint Commission-compliant label.

When a drug is scanned, SLS PCS audibly states and visually displays the drug name and concentration on the touch screen. This **electronic “double-check”** ensures that the drug the clinician intended to select is the drug that was selected prior to preparing the medication. SLS PCS then prints a ready to apply, **full-color compliant** label, eliminating handwriting and the need for rolls of messy colored labels on medication carts.

The system's sophisticated, centralized software transports your facility's approved drug database to the fingertips of your clinicians, bringing safer care to the point of care. Simultaneously, real-time notifications can be sent to key personnel about drugs being used on the floor, such as drugs not approved for use.



Full-color, ready to apply, compliant labels

## “Check Before You Inject”

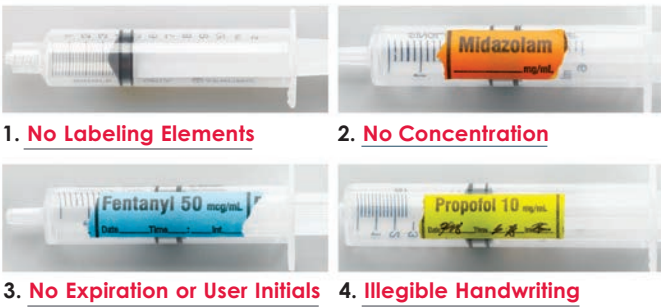
Once a medication is prepared and labeled, the barcode on SLS PCS labels enable a “triple check.” Simply scan the labeled medication prior to administering to the patient, and the system will present another audible and visual confirmation of the drug, as well as display the time remaining until the medication will expire. In addition, the barcode enables integration with the entire hospital system. For example, it can be read into the EHR and AIMS system to properly document the procedure into the patient record.

# Reduce and Eliminate Errors

SLS reduces the three most common medication errors made in the OR:

Common Error	Codonics SLS Solution
1. Vial /Ampoule Swaps	SLS PCS scans the drug container and asks for confirmation before printing the label
2. Mislabeling	SLS PCS provides JTC compliant full-color labels based upon a site-specific, pharmacy-developed formulary
3. Syringe Swaps	Administer Mode enables the labeled syringe to be scanned to identify its content immediately prior to administration

SLS eliminates the four most common syringe labeling errors:



## Look-alike Medication Vials

Some vials and ampoules look alike. SLS reads the barcodes on the parenteral containers and provides a visual and audible confirmation of the drug to eliminate vial swaps.

Confirming  
Fentanyl  
10 mcg/mL



### Technology


- Every anesthetizing location should have a mechanism to identify medications before drawing up or administering them (bar code reader) and a mechanism to provide feedback, decision support and documentation (automated information system).



# Easily managed, easily deployed throughout your facility.

**S**LS Administration Tool (AT) is the heart of the Safe Label System and the cornerstone for safe medication management. SLS AT is the first tool that combines the hospital's existing drug database with site-specific and best practice standards to ensure consistent, safe, hospital-wide medication preparation. The software provides the means to easily import a drug database and embeds a site-specific approved formulary of medications, concentrations, dilutions, diluents and best safe practice rules for use with a comprehensive set of professional organization guidelines and standards for safe labeling.

SLS AT is managed by pharmacy with input from your medical staff and gives pharmacy unprecedented tracking and record keeping capabilities for the drugs used in the operating room and the floors where SLS Point of Care Stations (PCS) are deployed. SLS AT provides safe medication management and eliminates the need to have a pharmacist present at the preparation point and beyond (AIMS/EHR).



FDA-mandated barcodes provide drug ID and a link to hospital-approved drugs. The SLS AT has the unique ability to combine the drug ID with best practices, conditions for use, guidelines and international labeling standards that comply with APSF and BCMA initiatives.

## Data analytics at your fingertips

Data extraction with SLS PCS enables a wealth of analytics, assists with drug reconciliation and can improve billing accuracy. SLS PCS keeps an exportable dataset of every event such as what drug, prepared when, by whom, and pre-administration confirmation, bringing checks and balances to some of the hospital's fastest-paced, error-prone environments.

*"As a pharmacist, I have worked with many formularies. By far, SLS AT redefines "user friendly". **Formulary updates are truly effortless and instantaneous**, pushed over the network to every SLS PCS real time, providing pharmacy with the confidence in knowing that the data being used by our ORs and floors is always correct and complete."*

**Jerry Gonzales, Pharm. D., FCSHP**

System Director of Pharmacy  
NorthBay Healthcare Group

## Bar Code Medication Administration (BCMA)

Codonics Safe Label System (SLS) barcode technology brings your patient floors closer to your BCMA initiatives. SLS barcoded medication labels enable integration with existing EMR and BCMA systems to enhance the safety and effectiveness of drug order verification at the bedside and beyond. Every SLS label includes a barcode that when integrated with the EMR can meet BCMA initiatives as acknowledged by ARRA (American Recovery and Reinvestment Act), APSF (Anesthesia Patient Safety Foundation), and other professional organizations.







# Why? Because you care.

We all benefit from the adoption of safe practices. Great leaders invest in technologies that make it easier to be safe because they know medication errors are not an option. These safe practices aid in protecting the dedicated medical professionals who are truly devoted to patient safety.

Consistent with the American Patient Safety Foundation's (APSF) recent call for a new paradigm, challenging the effectiveness of traditional methods and calling for the application of Standardization, Technology, Pharmacy and Culture, SLS embraces the call to action and ushers in the cultural change required to establish an environment of open communication, cooperation and recognition of the benefits of STPC.

Safe Label System is a medication innovation, designed to put safety practices in place to prevent human error and help drive high performance care wherever medications are prepared. Together, we can put the right systems in place to guard against medication labeling errors and bring an end to preventable healthcare harm.

## For the C-Suite

As the facility's safety champion, you can drive change and ensure best practices by making an even **greater commitment to patient safety**, assuring your community their care is your greatest concern. SLS enhances medication labeling, making hospital care safer, more reliable and less costly.

- Standardizes medication preparation throughout your facility with barcode technology
- Complies with the Joint Commission National Patient Safety Goals and meets the intent of ISO 26825, ASTM 4774 Standards and ASA Guidelines for full color labels
- Lowers the costs of morbidity through reduced ICU time and prolonged hospital stays
- Meets the 2014 ARRA barcoded medication guidelines to **maximize reimbursements**
- **Reduces expensive pre-filled syringe use**
- Decreases medical and financial risks

## For the Nurse

Despite your dedication to excellent patient care, medication errors are among the most common medical mistakes. To help ensure patient safety, SLS Point of Care Station (PCS) can be placed anywhere medications are prepared – such as patient floors and nurse medication prep stations – **providing accurate and compliant medication labels** on demand.

- Medication labels contain all elements required by the Joint Commission to ensure compliance
- SLS label barcodes integrate with BCMA, enabling the nurse to carry more than one prepared and labeled syringe at a time to improve efficiency on the floors
- Reduces waste and saves money by using SLS PCS to prepare multiple syringes from a vial at the nursing stations
- Eliminates the need to carry vials and ampoules



## For the Anesthetist

The operating room is a busy environment where rapid workflow often requires immediate decisions. **SLS PCS acts as your second set of eyes and operates in seconds**, utilizing barcode technology to reduce the element of human error. Drugs scanned on SLS PCS are immediately confirmed with visual and audible confirmations of the medication at preparation and again at administration. Fully descriptive, easy to read labels are automatically printed and are compliant, complete and safe.

- Reduces vial /ampoule swaps, mislabeling, and syringe swaps - the three most common drug errors (>60%\*) made in the OR
- Improves workflow and productivity by eliminating time-consuming, error-prone handwritten labels
- Sits conveniently on your existing drug cart using Codonics optional shelf

\* Anesthesiology News, January 2012: Bar-Code Scanning Can Fix 'Black-Hole' of OR Drug Safety



## For the Pharmacist

Never before has a formulary been more user-friendly, practical and easy for pharmacy to manage and update, and provides instantaneous insight of drugs and drug information throughout a hospital. Safe Label System gives pharmacy **unprecedented tracking and record keeping capabilities**. The AT allows pharmacy to create a known "source of truth" of site-approved drugs using site-approved rules that provide the capability to instantaneously verify a drug class and type per industry standards.

- Controls deployment of formulary and configuration packages to any SLS PCS
- Automatically monitors SLS PCS status over the network by receiving real-time feedback from each device
- Ensures formulary data is correct, complete and connected to the OR, ICU, PACU and wards, extending the pharmacy's scope of influence
- Data extraction with SLS PCS enables a wealth of analytics, assists with drug reconciliation and can improve billing accuracy
- Batch Mode automatically prints multiple copies of the same label and can include two sets of initials when a second check for safety is required







# A partnership to enhance medication safety.

**C**odonics has partnered with the top names in the industry to improve patient safety and quality of care by better connecting the healthcare environment. Safe Label System can be paired with anesthesia information management software for single login, single scan to electronically document medication in the patient's electronic health record, significantly improving the workflow.

In addition, Safe Label System can provide an additional layer of medication safety prior to, during, and after surgery. SLS supports electronic verification of medication helping to reduce the chances of medication errors during the selection, preparation and administration of injectable and intravenous medications.

**B | BRAUN**

**iMDsoft**

**Intelligent  
Hospital  
Systems™**

**Cerner**

**Epic**

**plexus**  
information  
systems

**Omnicell®**

**BD**

**Codonics is in cooperation with leading manufacturers to enhance medication safety and workflow efficiency.**



*"The integration of Codonics SLS and Omnicell Anesthesia Workstation systems has automated and standardized medication management within the complex OR environment to improve efficiency and increase patient safety."*

**Jeffrey L. Wagner**

Pharm.D., MPH, RPh, BCPS, Interim DOP  
Texas Children's Hospital



**Omnicell Anesthesia Workstation  
KLAS Category Leader  
Anesthesia Cabinets 2011, 2014\*\***

## Allow me to demonstrate...

Call Codonics today and let us show you how effective SLS can be in your facility.

800.444.1198 / +1.440.243.1198  
[www.codonics.com](http://www.codonics.com)

Scan this QR Code to view a video on Safe Label System



**CODONICS**

\*We are at varying levels of integration with our partners. Contact your Codonics sales representative for details.  
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\*\*Best in KLAS Awards – Medical Equipment & Infrastructure Report, July 2014 ©2014 KLAS Enterprises, LLC.  
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# CODONICS

## Who we are...



*"Codonics is committed to ending medication labeling errors forever and we are proud to work with renowned medical centers, organizations and governmental agencies worldwide to advance best practice standards for medication safety."*

**Peter O. Botten, Codonics President and CEO**

Codonics is a global business, providing healthcare with some of the most advanced medical imaging and patient safety products in the world from our headquarters in Cleveland, Ohio. Since 1982, Codonics has experienced exciting growth and award-winning achievements. Today, we are represented in 110 countries with more than 30,000 product installations in renowned, cutting-edge medical facilities throughout the world.

Codonics has always looked for what has yet to come, believing that consistent dedication to advancing healthcare could transcend other ordinary solutions and conventional boundaries. Our commitment to provide innovative products and market-leading solutions is changing the face of healthcare. We are passionate about engineering products that improve medication safety so significantly they are recognized as a standard of care throughout the world.

Codonics has been highly recognized for product innovation and exporting excellence with these prestigious honors: MDEA, Frost & Sullivan, Healthcare Heroes, NorTech, Stevie's International Business, IBN Global Business Leadership, Commercial News USA, the Governor's E-Award, and by the White House with the President's E-Award.



# CODONICS®

We bring the future into focus

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SLS is first in its class of advanced syringe labeling patient safety devices; 510(k) cleared to market as a Class II device (K101439). Copyright © 2013-2016 Codonics Inc. 9/2016

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